

**Amendments to the Specification:**

On page 1, prior to the first paragraph which begins on line 4, please insert the following:

FIELD OF THE INVENTION

Please replace the paragraph which begins on page 1, line 4 and ends on line 17, with the following rewritten paragraph:

The present invention concerns a semiconductor sensor, especially a so-called ISFET or CHEMFET sensor, which includes an ion-sensitive, field effect transistor.

BACKGROUND OF THE INVENTION

The ion-sensitive elements, which are present in the form of chips, must, in order to realize their purpose, be mounted such that they can, on the one hand, be subjected to the usually highly corrosive samples, without that, on the other hand, corrosion-susceptible components, such as conductive traces, come in contact with the media. To this end, the ion-sensitive element of a semiconductor chip is usually arranged aligned with an opening in a wall of a sample chamber, with an annular seal being arranged between the wall of the sample chamber and the semiconductor chip. The annular seal surrounds the opening, so that the ion-sensitive region of the semiconductor chip can be subjected to the sample, without the sample being able to reach the areas of the chip outside of the ion sensitive region.

Please replace the paragraph which begins on page 2, line 22 and ends on line 24, with the following rewritten paragraph:

This solution is very costly ~~in-the~~ with respect ~~that-the~~ to leading of the electrical contacts through the chip from its front side to its rear side increases its manufacturing

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costs several times.

On page 2, prior to the paragraph which begins on line 25, please insert the following:

SUMMARY OF THE INVENTION

On page 4, prior to the paragraph which begins on line 6, please insert the following:

BRIEF DESCRIPTION OF THE DRAWINGS

On page 4, prior to the paragraph which begins on line 16, please insert the following:

DESCRIPTION OF THE PREFERRED EMBODIMENT